Infant Mortality:

Care for our Children, Care for our Future

National Commission to Prevent Infant Mortality

Infant Mortality: Care for our Children, Care for our Future

"Each child represents either a potential addition to the productive capacity and enlightened citizenship of the nation or, if allowed to suffer from neglect, a potential addition to the destructive forces of a community."

Theodore Roosevelt

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The Honorable
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Prepared By:

National Commission to Prevent Infant Mortality

January 1988

Introduction

Infant mortality—the number of babies who are born alive but die before their first birthday—is one of the best indicators of the overall health of a community. Though the United States has made great strides in reducing its rate of infant mortality, our country still ranks behind other industrialized nations such as Japan, France, Australia and Singapore.

- In 1985, over 40,000 babies died before their first birthday. This means that in the United States nearly five babies died every hour. Two or three of these deaths could have been prevented.
- According to UNICEF, the U.S. infant mortality rate (10.6 deaths per 1,000 live births) is higher than 17 other industrialized nations; this means the U.S. ranks 18th out of 36 industrialized nations.

Our high rate of infant mortality is due primarily to our steady rate of low birthweight babies—infants born weighing less than 5 pounds, 8 ounces—who have a substantially poorer chance for survival and a healthy life. Since the late 1960's, the U.S. infant mortality rate has steadily decreased. However, since 1982, improvements in infant mortality rates have come to a near halt.

This trend can be understood by recognizing that the drop in the infant mortality rate has *not* been accompanied by a drop in the low birthweight rate. In other words, our success over the years in reducing infant mortality has been a result of the ability of medical technology to save smaller and smaller babies. However, our technology is reaching the limit in its ability to save these babies. These two factors, our steady low birthweight rate and technology's limited ability to save very small babies, have caused the recent leveling off of our infant mortality rate. In some cases, the rate has actually begun to increase.

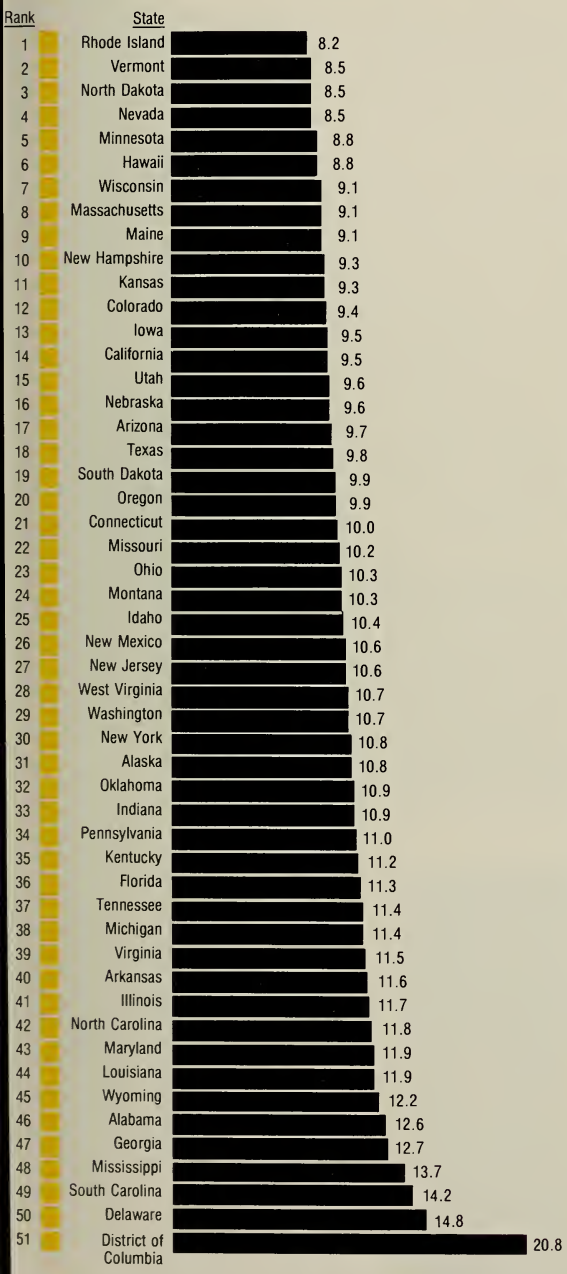
To reverse these trends, attention now must be paid to prevention—prevention during pregnancy and prevention during the first months of the child's life. The United States has the technology to save many premature babies; but, we also have the capability to prevent many of these babies from ever having to face the trauma of this high-tech care. In addition, once a baby is born, preventive or well baby care is important during the first year of life to help prevent problems which can cause death or disability.

In 1985, in the United States nearly five babies died every hour. Two or three of these deaths could have been prevented.

Publicly funded programs have addressed some of the problems associated with infant mortality and low birthweight by providing financial access to necessary prenatal and other health care services, especially for low income women. However, cuts in federal programs and strains on state budgets have diminished some state and local capacities to deliver comprehensive health care services. This situation must be addressed. It doesn't make sense to incur the high human and financial cost involved in saving these very small babies when this cost is compared to the relatively small cost of investing in preventive prenatal and early pediatric care.

Trends and Factors Associated With Infant Mortality

Infant Mortality in the United States, 1985



NOTE: The infant mortality rate is the number of babies who are born alive but die before one year of age, per 1000 live births.

SOURCE: National Center for Health Statistics, 1985 final data.

The factor most closely associated with infant mortality is low birthweight. Babies born too small (under 5 pounds, 8 ounces) have a very poor chance for survival, and those that survive often have either a mental or physical handicap. The lower the birthweight, the higher the risk for death or disability.

Low birthweight babies are 40 times more likely to die in the first month of life than babies who weigh more. Furthermore, the risk of neonatal death (infant death up to the age of 28 days) is 200 times greater for very low birthweight infants than for normal birthweight infants. Low birthweight infants are also five times more likely than normal weight infants to die during the postneonatal period (from 28 days to one year of age).

Neonatal mortality is most often associated with poor maternal health status, lack of adequate prenatal care, and low birthweight. Although Sudden Infant Death Syndrome (SIDS) is the most common cause of postneonatal mortality, the next two leading causes, infections and accidents, are most commonly associated with "environmental" factors such as poverty, inadequate nutrition, poor housing conditions and lack of preventive child health care.

Infants born with low birthweight are at risk:

- Two-thirds of the deaths that occur in the neonatal period (from birth to 28 days of age) occur among infants who weigh less than 5 pounds, 8 ounces.
- Almost 40% of very low birthweight infants (under 2 pounds, 8 ounces) and 20% of low birthweight infants (under 5 pounds,

8 ounces) will be re-hospitalized more than once during their first year of life.

- Low birthweight infants are twice as likely to suffer one or more handicaps, such as mental retardation, deafness, blindness, physical limitations, learning disabilities, delayed speech, autism, cerebral palsy, epilepsy, or chronic lung problems.

Babies may be born too small because they are born too early (premature) or because their growth was impaired as they developed in the uterus or both. Health and socioeconomic factors contribute to the incidence of low birthweight, including lack of prenatal care, poor maternal nutrition, alcohol consumption and smoking during pregnancy, and inadequate spacing between pregnancies. Low birthweight babies are more prevalent among poor, less educated, single parent and minority mothers.

- Infant mortality rates for black babies are nearly twice as high as those for white babies. In fact, the infant mortality rate for black infants in some U.S. cities is worse than the rates in some developing countries.
- As many as 2,500 infant deaths in 1984 can be attributed to smoking by the mother during pregnancy, according to a recent study by the Centers for Disease Control.
- Low income women obtained fewer prenatal visits and later in their pregnancy than privately insured women, according to a recent General Accounting Office (GAO) study. Of the babies born to low income women in GAO's sample, 12.4% were low birthweight, compared to a nationwide average of 6.8%.

Steve Stine

Babies born too small (under 5 pounds, 8 ounces) have a very poor chance for survival, and those that survive, often have either a mental or physical handicap.

Preventing Infant Mortality

Our best means of preventing infant mortality is to reduce the number of low birthweight babies. The best way to lower the incidence of low birthweight is to ensure that women receive adequate prenatal care. Insuring access to prenatal and preventive pediatric care will help to reduce infant deaths during the critical first year of life.

The Institute of Medicine (IOM), in *Preventing Low Birthweight*, (1985) concludes that "the prevention of low birthweight could contribute significantly to a reduction in infant mortality in the United States and, more generally, to improved child health." The report also states that a more vigorous intervention strategy is necessary to reduce the incidence of low birthweight in our country.

The IOM study concludes that emphasis should be placed on identifying women before pregnancy who are at high risk for having a low birthweight baby, assuring increased access to prenatal care, and targeting the content of prenatal care to better suit the needs of high risk (and low risk) women. By identifying high risk women as soon as possible, there is a much better chance of preventing the incidence of low birthweight. Prevention of low birthweight through adequate prenatal care and preventive pediatric care can help lower our infant mortality rate.

- The number of babies born to mothers who did not receive adequate prenatal care has grown by nearly 10 percent since 1979. In 1985, 24% of all mothers failed to begin prenatal care in the critical first trimester of pregnancy.
- About 80% of the women at high risk of having a low birthweight baby can be identified in the first prenatal visit and interventions to reduce the risks can be implemented, according to the U.S. Department of Health and Human Services.

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The Costs of Infant Mortality

In addition to the emotional costs associated with infant mortality, there are other costs as well. This nation pays a high price—in fiscal terms and in lost human potential—for babies who are born unhealthy. In this time of limited government budgets and a shrinking pool of young people from which will come the leaders of tomorrow, our country cannot afford to ignore this pervasive national tragedy. Prevention is the best and most cost-effective way to promote the health of our next generation.

Caring For A Low Birthweight Baby

The smaller the baby, the poorer the chance of healthy survival. A low birthweight baby is more likely to need costly special care (neonatal intensive care, intermediate or sick baby nursery) to help the infant survive. Surviving low birthweight babies have a greater chance of having a mental or physical handicap, which could require a lifetime of costly care throughout the life of the individual.

The lower the birthweight, the higher the likelihood that a newborn will need sophisticated costly care throughout life. Numerous studies have confirmed the cost-effectiveness of investing in prenatal care compared to the high cost of saving or treating a low birthweight baby. These studies make a convincing case for investment in prevention.

- The Institute of Medicine estimates that for every $1 spent on prenatal care, $3.38 is saved. Some studies document savings as great as ten dollars saved for every dollar spent on prenatal care.
- The cost of prenatal care not including labor and delivery has been estimated to be $400 per pregnancy, according to the Institute of Medicine. Preventive care for an infant's first year costs about $600.

Compared to . . .

- The cost of "graduating" a sick infant from neonatal intensive care ranges from $20,000 to $100,000 per infant.
- Overall lifetime health and custodial care for a handicapped child may cost as much as $300,000 to $400,000 per child.

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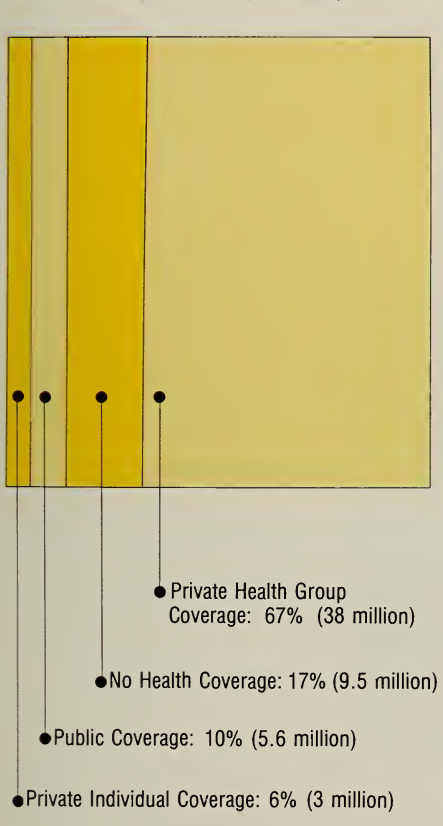
Distribution of Health Insurance Coverage for Women of Childbearing Age, 1985



Source: "Financing Maternity Care in the United States", The Alan Guttmacher Institute, December, 1987.

Increased Cost for Health Care: Who Pays?

Maternity and neonatal intensive care for low birthweight babies is most often paid for by public and private health insurance. Many of the mothers of these infants are dependent on federal and state assistance programs such as Aid to Families with Dependent Children (AFDC) and Medicaid, as well as other state-sponsored assistance programs that provide or subsidize coverage for prenatal care and health costs. For the working population, employers are the primary source of health care coverage.

However, in the U.S., 35 to 37 million people are without any health coverage at all. This group consists of those individuals who do not qualify for public assistance and who lack private health insurance. The majority of these individuals are employed and are often referred to as the "working poor."

- Uninsured workers and their dependents account for three-fourths of all Americans without health insurance coverage.
- The Alan Guttmacher Institute reports that 17% (9.5 million) of all women of childbearing age lacked health insurance in 1985.

When these uninsured pregnant women go to hospitals to have their babies, hospitals are often left with large unpaid bills. Hospitals have historically passed this loss on to paying patients, increasing the overall costs of health care and insurance for the private sector.

- A South Carolina study found that in 1983, hospitals shifted $69 million from those who could not afford to pay for care to the costs

paid by paying patients. Forty-three percent of indigent admissions at the hospital were obstetric and gynecology, pediatric or newborn patients.

- A study of 30 hospitals in Massachusetts found that three-fifths of bad debts were attributable to those without third party payment. The largest category of uncollected costs were for maternity and maternity-related care.

The size of the uninsured population and cost containment strategies in the public and private sectors are forcing hospitals to re-examine their ability to provide charity care. Such changes may threaten access to care for low income uninsured individuals, especially those requiring high cost delivery services. This situation necessitates actions by the public and private sectors that focus on ensuring access to health care services for the uninsured.

Early and sustained intervention (beginning with adequate prenatal care) must be provided to give our children the best chance of becoming productive members of our society.

Lost Human Potential

There is also a cost associated with lost human potential. The continued success of our nation depends on the existence of a healthy, well-educated work force. Much has been written about the need for quality education in our schools to produce a new generation capable of addressing the increasingly complex problems of tomorrow. But attention is now being focused on early intervention strategies *before* a child reaches school in order to give that child the best chance of succeeding in school.

A report recently released by the Committee for Economic Development, an organization of leading CEO's who make public policy recommendations, concluded that early and sustained intervention (beginning with adequate prenatal care) must be provided to give our children the best chance of becoming productive members of our society. The report states that one of the reasons that disadvantaged children are more likely to have an inadequate education is because they are often physically underdeveloped, making it much harder for them to survive academically. "Just as it is less expensive to provide prenatal care . . . than it is to care for a premature or low birthweight baby, it is also apparent that the longer ameliorative efforts are postponed the more difficult, extensive and costly they become."

We are paying on the high side of the health care cost equation—expensive, "after-the-fact" care, increasing hospital costs for the sick, and lost human potential. A reorganization of health care expenditures by putting resources into the preventive side of health care will, in the long run, result in significant savings in both dollars and human potential.

Actions for Reducing Infant Mortality

The problem of infant mortality affects everyone in our nation. All Americans are paying a high financial cost for poor birth outcomes and our society cannot function at its greatest potential without healthy citizens.

However, there is good news. The problem of infant mortality is one that can be solved. Strategies exist *now* that can improve child health outcomes. So many of society's problems can be traced in one form or another to a poor start in life. Child abuse, learning disabilities, welfare dependency, escalating health costs and many other problems have some relationship to a child's health status. Clearly, we all have a stake in the health of our children and our nation and actions taken now can ensure the health of our next generation.

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The National Commission to Prevent Infant Mortality

The National Commission to Prevent Infant Mortality was created by Congress to develop a *national* strategy for reducing infant mortality. Because infant mortality is a problem which has far reaching implications for everyone in our nation, the Commission will hold a series of four national hearings that will examine the role of various sectors of society—federal and state government, the private sector, the media, and explore the international perspective—to highlight solutions that can be taken by each of these groups. The Commission believes that everyone has a role in reducing infant mortality. Only by working together can the tragic incidence of infant death be reduced.

The Role of Federal and State Government

The federal and state governments, along with local governments, have a clear leadership role in reducing infant mortality. While the financing of health care services for pregnant women and their infants is largely provided by private health insurance, the role of government is to meet the needs of vulnerable populations whose care is not provided for by private resources. Governments also work with the private sector to support and encourage the development and enhancement of services for vulnerable groups, such as the uninsured, low income, undereducated and otherwise disadvantaged individuals.

On the federal level, programs such as Medicaid, Aid to Families with Dependent Children (AFDC), the Maternal and Child Health Block Grant, the Special Supplemental Food Program for Women, Infants and Children (WIC), and Community Migrant Health Centers are the primary assistance programs offered to address the needs of pregnant women and their infants. Eligibility for these programs is for the most part determined by income and, in some instances, by medical need. The federal government typically sets broad guidelines for eligibility and services to be provided under these programs within which each state structures the programs to best serve its residents. Each state is allowed to determine its eligibility level for these programs.

- In 1985, Medicaid subsidized 15% of all deliveries in the U.S. and the federal and state governments spent almost $1.2 billion annually for maternity care, according to the Alan Guttmacher Institute.
- Recent expansions of Medicaid for poor pregnant women and children allow for coverage of tens of thousands of additional individuals who would otherwise be uninsured. In the first year, 24 states provided coverage for this population.

But even with these programs, significant problems remain:

- Because states set their own Medicaid eligibility levels, eligibility varies tremendously among states, from about 16% to 100% of federal poverty ($9,300 for a family of three in 1987).
- Six million children with incomes below the federal poverty level are without Medicaid coverage.

On the state level, governors and legislators have a variety of means open to them for improving the health of pregnant women and infants. The most successful approaches are those that expand upon existing programs or incorporate new ones to fill in gaps. State legislatures may also adopt legislation to target resources to particular segments of the population such as teens or the medically indigent, or to particular problems such as Medicaid reimbursement.

States have begun to exercise options available under existing Federal programs. These options range from expanding Medicaid eligibility levels to reach more pregnant women, infants and children to making better use of federal nutrition programs.

- A number of states are implementing initiatives to reduce financial barriers to prenatal and delivery services. Such programs

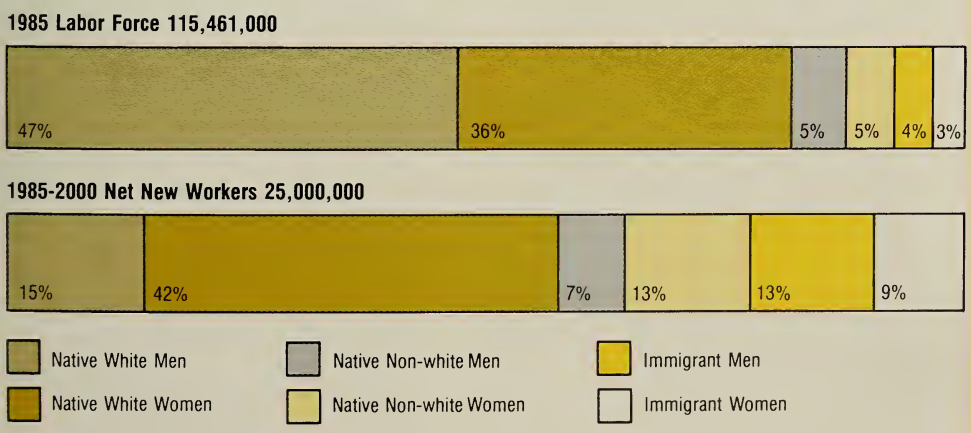
combine Medicaid and MCH Block Grant resources, among others, to provide affordable and accessible services. Women are encouraged to seek care early in pregnancy and receive necessary services throughout the pregnancy and thereafter.

The Role of the Private Sector

The private sector, including businesses, community groups, religious organizations, and others, can "fill in the gaps" left by the public sector. Because the corporate community plays a dual role of employer and community leader, it can provide a crucial catalyst for raising awareness of a problem, implementing solutions and obtaining results. Corporate leaders can have a special role in preventing infant mortality.

Employers and business leaders will face increasing pressure to address the needs of pregnant women—women now make up almost half of the work force. Employers are faced with increasing employee health care costs and a growing uninsured population. To address these trends, businesses have several options including developing cost-effective approaches to providing quality health benefits that stress comprehensive maternity care, initiating special support services for pregnant women, implementing prevention and education programs, and attempting to provide health insurance to all employees.

Composition of the U.S. Labor Force in the Year 2000



Source: "Workforce 2000—Work and Workers for the 21st Century", The U.S. Department of Labor and the Hudson Institute, 1987.

- Today close to half of all mothers with infants under one year of age work outside the home.
- Corporate spending on employee benefits rose by 250% between 1975 and 1983.
- Almost two-thirds of the new entrants into the workforce between now and the year 2000, will be women.

As members of the community, business leaders can provide a vital link with other community leaders. Partnerships between business, community groups, and religious organizations are becoming increasingly effective in identifying needs and filling in gaps in services. Corporate leaders can also serve a philanthropic role, supporting such community efforts.

- The Beethoven Project in Chicago, Illinois is a program involving local business leaders, community groups, and the local elementary school. The project provides prenatal care to expectant mothers so that their children will be in the best position to take advantage of the education they will receive when entering Beethoven Elementary School.
- Because of limited prenatal care resources in Los Angeles County—especially for low income women — Father John Seymore gathered funding from private foundations and individual contributions to establish a clinic called La Cuna, Inc. The clinic is staffed by volunteer nurses, counsellors, and physicians who provide a variety of services for pregnant women.

The Role of the Media

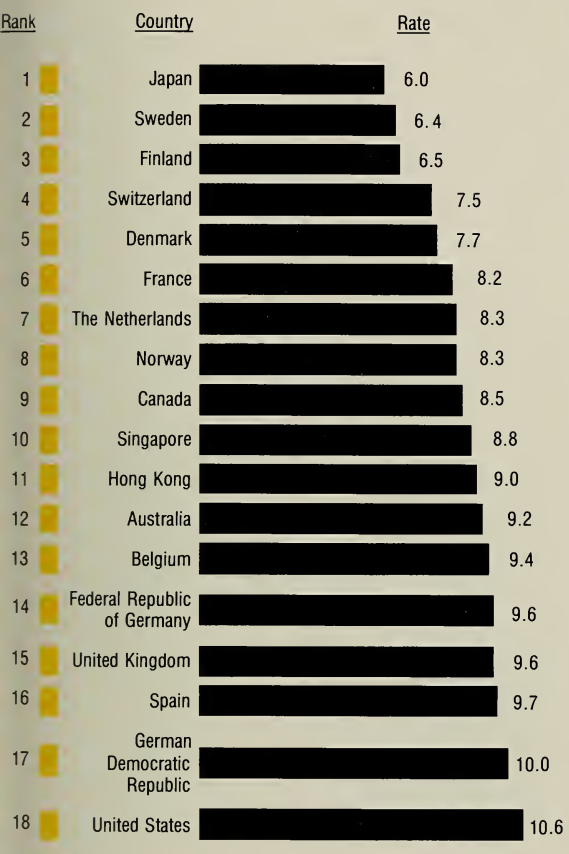
In recent decades, the role of the media in our nation has become increasingly complex and important. Advances in communication techniques have changed the way Americans do business, the way politicians communicate with their constituencies, the way public policy is shaped, debated and resolved, the notions of entertainment, and even the way news is seen around the nation and the world. The media touches the lives of every American, almost every day. The ability of the media to affect the course this nation takes in combating infant mortality and improving the health of mothers and children needs to be harnessed.

Because of the tremendous potential for reaching and educating a vast number of people, it is necessary to look at the role of the media in becoming involved in societal issues. There are many ways that the media (newspapers, television, radio, advertisers, etc.) can shape the actions and habits of the American population. Media involvement in raising the issue of infant mortality to national prominence and promoting healthy mothers and healthy infants makes sense.

- In the season opener of the television series "St. Elsewhere", the story line concerned the issue of perinatal AIDS (babies born with AIDS passed on from their infected mother). The audience saw the problem, experienced by many hospitals, of "boarder babies" — babies who are thought to have AIDS and are abandoned at hospitals by their mothers. The issue was handled in a very caring and sensitive manner. The mere inclusion of this storyline educated millions of Americans about this very real and tragic problem.

The International Perspective

International Infant Mortality Rankings



Note: The infant mortality rate is the number of babies who are born alive but die before one year of age, per 1000 live births.

Source: National Center for Health Statistics, provisional 1984 data, except for (1) U.S., which is 1985 data and (2) Hong Kong, which is from UNICEF.

The United States ranks behind 17 other industrialized nations in terms of infant mortality. Our nation is one of the most technologically advanced in the world. The United States expends a great deal of technological resources on saving babies born too soon or too small. This high-tech, very expensive care would not be necessary if we expended an equal amount of energy on preventing these poor birth outcomes.

Much can be learned from other nations' societal approaches to reducing infant deaths. In order to develop creative, cost-effective initiatives to lower our infant mortality rate, it is necessary to study not only our progress at home, but also to examine successful approaches abroad that could be adapted to our needs on the local, state and federal levels.

- In a recent report by C. Arden Miller, M.D., which analyzes medical and social services to pregnant women, newborns, and their families in ten European countries, Dr. Miller concludes that the U.S. can learn from social support systems used in many other countries and that these approaches are adaptable to the unique circumstances within this country.
- In 1955, Japan ranked 17th worst in infant mortality rates. In 1985, Japan ranked first — with the world's lowest infant mortality rate. The United States, on the other hand, has gone from 6th in 1955 to 18th.

Conclusion

In the 15 year span between 1965 and 1980, the infant mortality rate in the United States fell by almost 50% without a comparable decline in the rate of low birthweight. Our advances in reducing infant deaths have come from our ability to save smaller and smaller babies. As the current trend in our infant mortality rate shows, technology alone will not reduce the incidence of infant death. Continuing the trend of past improvements in infant mortality will require a prevention-oriented strategy.

The good news is that we know much about how to reduce the number of needless infant deaths. And, prevention will prove less costly in the long run—emotionally, socially and economically—than sustained investments in newborn intensive care medicine and the subsequent long term health care and supportive costs these babies incur.

This preventive approach must involve everyone in this nation—the public sector and the private sector. Each citizen has a role to play. Everyone has a stake in addressing the problem of infant mortality and everyone should take part in preventing the needless deaths of tens of thousands of infants every year.

The future of our nation depends on a healthy population. The National Commission to Prevent Infant Mortality believes that investment in healthy well-educated children will greatly enhance the viability and vitality of this nation. Caring for our children *is* caring for our future.

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Investment in healthy well-educated children will greatly enhance the viability and vitality of this nation.

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The National Commission to Prevent Infant Mortality

The National Commission to Prevent Infant Mortality was created by Congress (P.L. 99-660) and established on July 1, 1987. The fifteen members of the Commission include Members of Congress, the Secretary of Health and Human Services, the Comptroller General of the United States, representatives of state governments, and experts in the maternal and child health field. Through a series of public hearings and meetings, a review of current federal and state programs and policies affecting the health of childbearing women and their infants, and an examination of private health care financing systems for the health care of these individuals, the Commission will develop a national strategy for reducing infant mortality in the United States. The Commission's report to the President and Congress, due within one year, will recommend action steps that the public and private sectors can take to achieve this goal.

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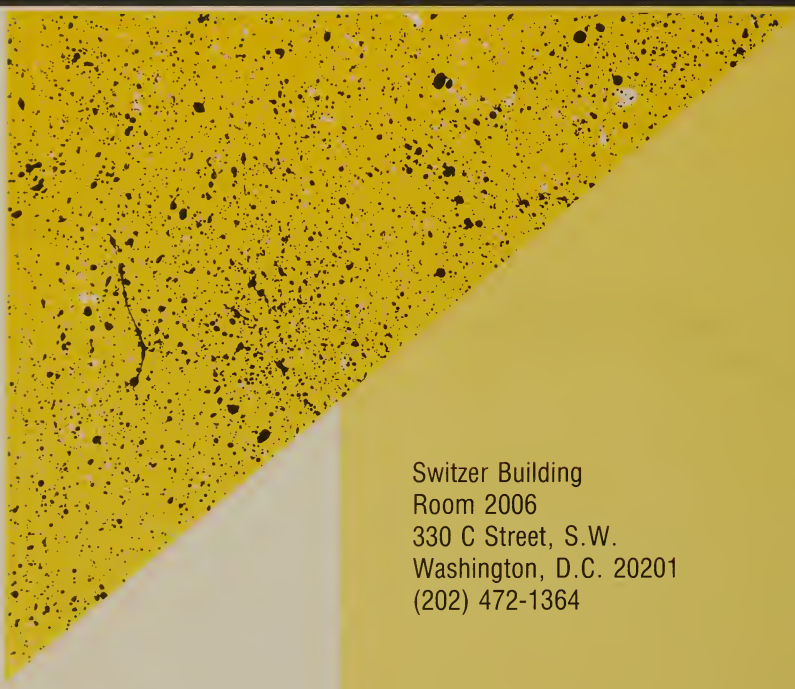
National Commission to Prevent Infant Mortality



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